GaAlAs/GaAs HIGH POWER SIDE LOOK PACKAGE INFRARED EMITTING DIODE **MIE-114A1**

Description

The MIE-114A1 is a GaAs infrared emitting diode molded in clear, lensed side looking package .

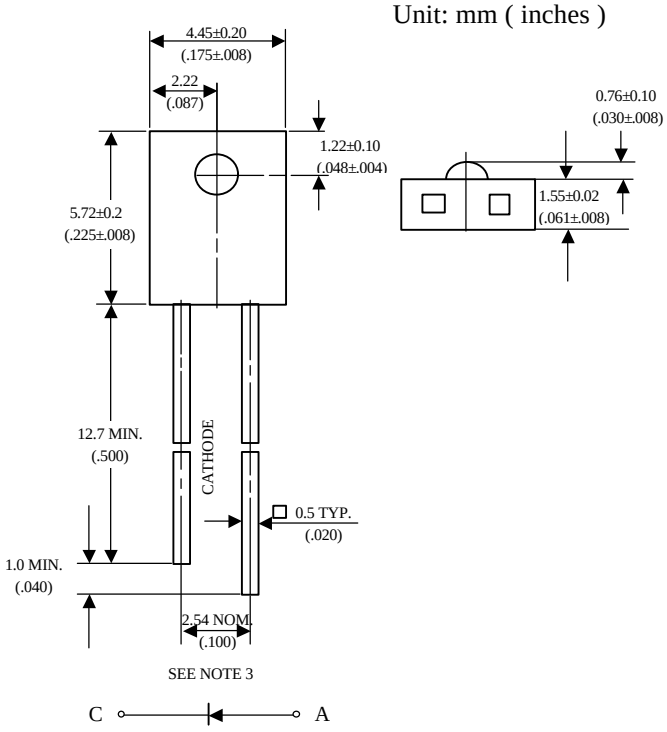
The MIE-114A1 provides a broad range of intensity selection .

Features

- Selected to specific on-line intensity and radiant intensity ranges
- Low cost, plastic side looking package
- Mechanically and spectrally matched to the MID-11422 of phototransistor .

Package Dimensions

Unit: mm (inches)



NOTES :
1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ T_A=25°C

Parameter	Maximum Rating	Unit
Power Dissipation	75	mW
Peak Forward Current(300pps,10μs pulse)	1	A
Continuos Forward Current	50	mA
Reverse Voltage	5	V
Operating Temperature Range	-55°C to +100°C	
Storage Temperature Range	-55°C to +100°C	
Lead Soldering Temperature	260°C for 5 seconds	

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Incidance	I_F=20mA	Ee	-	0.8	-	mW/cm^2
Forward Voltage	I_F=20mA	V_F	-	1.2	1.35	V
Reverse Current	V_R=5V	I_R	-	-	100	μA
Peak Wavelength	I_F=20mA	λp	-	940	-	nm
Spectral Bandwidth	I_F=20mA	Δλ	-	50	-	nm
View Angle	I_F=20mA	$2\theta_{1/2}$	-	80	-	deg .

Typical Optical-Electrical Characteristic Curves

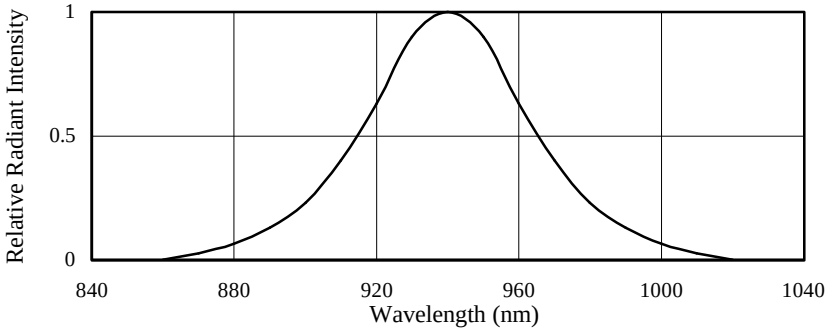


FIG.1 SPECTRAL DISTRIBUTION

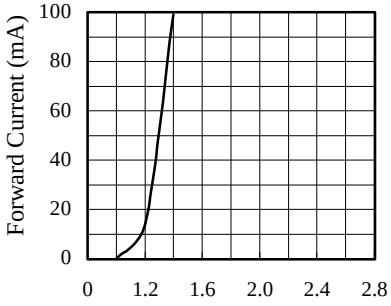


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

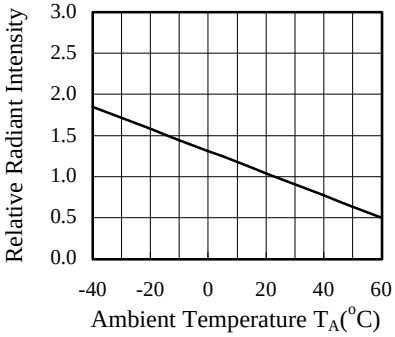


FIG.3 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

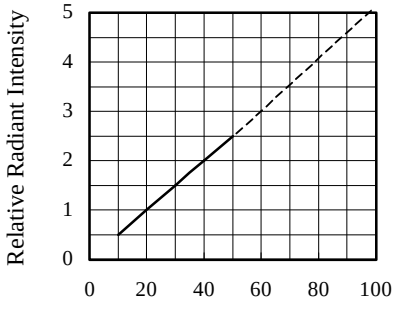


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

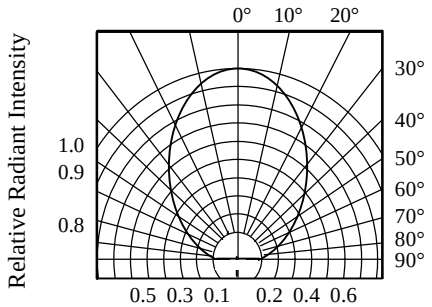


FIG.5 RADIATION DIAGRAM